Enhancing Autonomous Vehicle Technology with YOLOv8

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Abstract*: The system's products and features form the basis of the product search process. By splitting up and recording huge photos of low-quality images in high resolution, its performance may be easily balanced As machine learning advances quickly, powerful tools are capable of to take on more intricate, sophisticated, or profound features to address issues with legacy tools.. This project offers a new way to detect vehicles, pedestrians and traffic signs using only publicly available data. Because research requires long-term photographs (such as images shot in direct sunlight), it is challenging to incorporate research into the data, and confidence training is uncommon due in part to the nature of the data. We presents modification of the YOLOv8 model for training to improve accuracy. In that model, a number of constants and lossy components were employed. The reason behind this is that YOLOv8 works well utilizing mobile gadgets and requires less RAM management. Unity also provides additional support to simplify the conversion process.*

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